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Method for manufacturing semiconductor device

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Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
KR 2002089614	A	20021130	KR 200128386	A	20010523	200322 B

Priority Applications (No Type Date): KR 200128386 A 20010523

Patent Details:

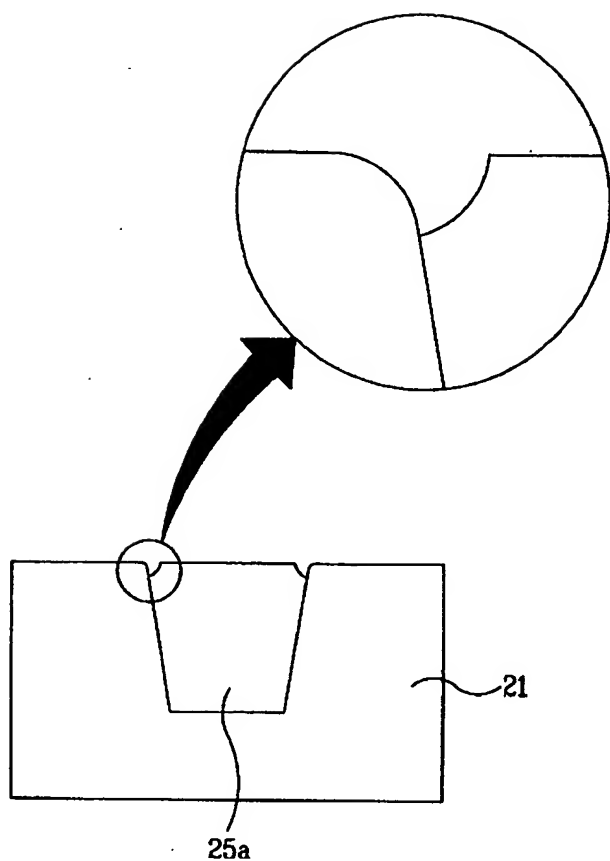
Patent No	Kind	Lan Pg	Main IPC	Filing Notes
KR 2002089614	A	1	H01L-021/76	

Abstract (Basic): KR 2002089614 A

NOVELTY - A fabrication method of a semiconductor device is provided to prevent a hump and an inverse narrow width effect by rounding edge portions of a trench in STI(Shallow Trench Isolation).

DETAILED DESCRIPTION - A pad oxide layer and a nitride layer are sequentially formed on a semiconductor substrate(21). A trench is formed by selectively etching the exposed semiconductor substrate(21). An isolation layer(25a) is formed by filling an insulating layer into the trench. After removing the nitride layer, the upper portion of the isolation layer(25a) and the pad oxide layer are removed by planarizing. The corner edges of the isolation layer(25a) are rounded due to moat by annealing in hydrogen atmosphere using an RTP(Rapid Thermal Processing) equipment. Then, a sacrificial oxide layer is formed by dry-oxidation using the RTP equipment.

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Title Terms: METHOD; MANUFACTURE; SEMICONDUCTOR; DEVICE
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